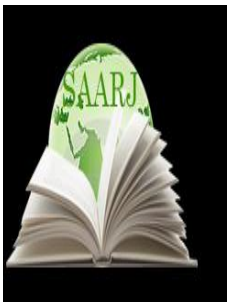

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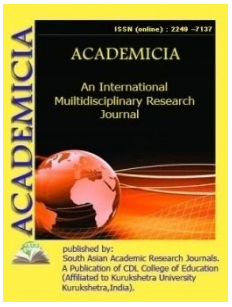

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THE ACTIVE PARTICIPATION OF STUDENTS IN THE FORMATION OF THE EDUCATIONAL PROCESS IS A KEY TO EFFICIENCY

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ABSTRACT

The article discusses the issues of attracting students in the process of forming educational materials, as well as the problems of increasing the effectiveness of educational and cognitive activities of students. In the "Learn" option of the test, immediately after selecting the correct answer, a message will appear stating that the answer is correct or incorrect. It contains the messages "correct", "incorrect" and "partially correct".

KEYWORDS: *Modernization, Educational Process, Educational And Cognitive, Independent Education, Effective Teaching, Test, Graphic Disciplines*

INTRODUCTION

From the point of view of modern development trends aimed at modernization of higher education and humanization, the problem of preparing future professionals for creative activity in the Technical University is important.

Pedagogical experience shows that the learning process does not involve the direct participation of students in the formation of generalized types of knowledge and activities in the construction of the learning process by traditional methods. Such reading does not stimulate the student's learning activity in the process of acquiring knowledge, skills and qualifications, does not allow for independent learning, development and self-expression.

The effectiveness of the learning process in relation to the acquisition of knowledge and creative development is determined by the fact that the student is focused on the correct organization of personal learning activities.

The problem of effective learning is not new to the science of teaching theory. This problem has been studied in the scientific works of I.G. Pestallotsi, K.D. Ushinsky and a number of similar scientists. Scholars such as SI Arkhangelsky, AP Arkhipov, B.C. Merlin, VA Sukhomlinsky and G.I. Shchukin also contributed to the coverage of this issue. They theoretically substantiated that the achievement in the process of learning increases the activity of learning and mastery, leading to the manifestation of important aspects of intelligence.

The tendency to improve the quality of education of future professionals and, at the same time, the constant decline of the graphic sciences requires the professor to look for new ways to improve the educational process.

The dramatic changes in the education system pose a number of challenges for teachers and students of technical colleges to think carefully about their activities.

While the main type of student activity is learning activity, for the professor-teacher it is educational work. Of course, the success of these two goals of the teacher and the student of the higher education system depends on their joint cooperation in improving the learning process. This collaboration will ultimately lead to an increase in learning.

There are a number of features that lead to a decrease in the performance of graphics in higher technical education:

- The low level of school readiness of those entering the technical university requires both teachers and students to engage in additional educational activities;
- Lack of psychological preparation of the student to master this course due to irresponsible attitude to the subject "Drawing" when entering the technical university;
- The novelty of the subject "Descriptive Geometry" for students, its unusual for the student, such as mathematics and physics, requires additional mental and willpower in their work;
- Lack of knowledge and skills in graphic work requires additional effort and a lot of time to learn the rules of drawing from the student;
- The teaching of graphic sciences coincides with the period of adaptation of the student to the educational process in the higher education system, the period of transition to the conditions of the higher education system, which differs significantly from the school environment.

It would be expedient to consider the above problems not only in the educational process at the Fergana Polytechnic Institute, but also as a global problem that exists in higher education institutions throughout the country.

Life itself requires the study of the problem of activating the student's learning, knowledge and its social, psychological, methodological and other causes.

At present, various forms of determining student knowledge are used in the educational process. In particular, test-type control works are used during intermediate, current and final tests.

Drawing geometry is one of the branches of geometry, which deals with the study of the geometric basis of the construction of images of objects in the plane, the methods of solving spatial geometric problems through images.The generality of methods in mathematics is also characteristic of this science. Drawing geometry is the theoretical basis for solving technical drawing problems.

The part of descriptive geometry of the subject "Descriptive Geometry and Engineering Graphics" in the curriculum is taught mainly in the 1st semester of the academic semester in most areas. The number of tests compiled from this section was more than 200 and was initially tested in the Mytest system. The questions included in it were unofficial and did not allow to reveal the full essence of science. In the Mytest program there is an opportunity to ask questions in the form of pictures. However, their capabilities are limited. Due to this, the level of knowledge detection is insufficient.

The solution of the above limitations in the Isrping software complex has provided an opportunity to take advantage of the latest advances in information and communication technologies. Thus, versions of test programs on the subject "ChG and MG" created in the software complex Isrping Quizmaker were developed. New pedagogical technologies have been introduced, “Learning” and “Testing” programs have been introduced into the educational process, including 12 different forms of test questions.

The program includes test questions "correct-incorrect", "1 correct choice", "many correct choices", "fill in the blanks", "compatibility", "arrangement", "enter the number", "missing word", "summary answers". , The presence of such types as "vocabulary", "active space" allowed to effectively use the questions in the form of graphics.

In the "Learn" option of the test, immediately after selecting the correct answer, a message will appear stating that the answer is correct or incorrect. It contains the messages "correct", "incorrect" and "partially correct". In the "Learn" version of the test, all the answers come in sequence. The variation option is disabled and the student has the opportunity to explore questions on topics that are consistent with the sequence in the science plan.

Previously, theoretical and practical questions were asked in written tests in midterm examinations. Practical questions were answered by students by drawing sketches. When theoretical answers were given in writing, they were mostly copied, either directly from a book or by telephone. As a result, the student's grade did not match his or her real knowledge.

With the introduction of the test program, the participation of the "human factor" in determining the student's grade will be reduced, which will be determined by computer.

An important role in the research work carried out at the department to improve the educational process is played by the management of independent work of students. Among the various types of modern technologies of pedagogical control, special attention is paid to test methods.

This method activates memory, activity, thinking, attention in the student. The inevitability of passing a test-based test control creates a motivating force in the student. Increases his activity related to reading and learning.

However, the main part of the existing tests in graphic arts at the present time is intended for use only in the intermediate and final controls and does not meet the requirements of the student's independent reading and learning activities.

Almost no research has been done on involving students in the preparation of pedagogical test assignments. Ways to improve this process in technical universities have not been sufficiently analyzed and substantiated. Lack of standards for assessing the level of knowledge, skills and competencies in special disciplines of modern technical education leads to a breakdown of feedback between teacher and student.The student is unable to reflect on the knowledge he or she is acquiring, to correct the teaching, and to determine the path to the main goal - successful learning and creative development.

To find ways and means to increase the learning and cognitive activity of first-year students during the period of adaptation to the educational process, based on the study of the experience of higher and secondary schools, analysis of philosophical, sociological and psychological-pedagogical literature is an important challenge. To study the contradiction between the growing public demand for the creative activity of the future engineer and the need to increase his professional and creative training in this regard is the main direction of our research.

Problems of increasing students activity in the classroom are not sufficiently developed pedagogically, theoretically and methodologically - the lack of science-based test assignments to assess the quality of teaching students in engineering graphics and increase their learning activity is also a major part of the problem.

It is necessary to develop a new approach to the issue of directing students from stressful situations to positive activities, which will increase their interest in the topic studied during the period of adaptation to the learning process. Research in this area shows that the use of pedagogical tests increases the quality of student learning and learning.

To do this, it will be necessary to involve the student in the following activities:

- use a specially designed bank of experimental test assignments;

- perform knowledge testing on a regular basis;

- involving students in the preparation of test assignments independently;

- creating conditions for pedagogical testing and ensuring that students have a deep penetration into the subject.

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